IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) An apparatus, including:

a digital processor to shift a digital baseband signal upward along a frequency spectrum by a selected amount of frequency shift to provide a first elevated frequency digital baseband signal and a second elevated frequency digital baseband signal derived from a phase-shifted version of the digital baseband signal; and

a digital mixer to receive the digital baseband signal and to provide the first elevated frequency digital baseband signal,

wherein the selected amount of frequency shift is greater than about a bandwidth of the digital baseband signal.

2. (Canceled)

3. (Original) The apparatus of claim 1, further including:

a phase shifting module to receive the digital baseband signal and to provide the phase-shifted version of the digital baseband signal.

4. (Canceled)

5. (Previously Presented) The apparatus of claim 1, further including:

a digital to analog converter to receive the first elevated frequency digital baseband signal and to provide an analog signal.

6. (Original) The apparatus of claim 5, further including:

an image reject mixer to receive the analog signal and a carrier signal.

7. (Original) The apparatus of claim 6, further including:

a filter to pass a non-rejected sideband signal provided by the image reject mixer.

8. (Original) The apparatus of claim 1, wherein the digital baseband signal is formatted according to an Institute of Electrical and Electronics Engineers 802.11 standard.

9. (Currently Amended) An apparatus, including:

a first digital mixer to receive a digital baseband signal and to shift the digital baseband signal upward along a frequency spectrum by a selected amount of frequency shift, to provide a first elevated frequency digital baseband signal;

a phase shifting module to receive the digital baseband signal and to provide a phase-shifted version of the digital baseband signal;

a second digital mixer to receive the phase-shifted version of the digital baseband signal and to shift the phase-shifted version of the digital baseband signal upward along the frequency spectrum by the selected amount of frequency shift, to provide a second elevated frequency digital baseband signal; and

a digital to analog converter to receive a selected one of the first elevated frequency digital baseband signal and the second elevated frequency digital baseband signal and to provide an analog signal to an image reject mixer,

wherein the selected amount of frequency shift is greater than about a bandwidth of the digital baseband signal.

10. (Original) The apparatus of claim 9, further including:

a surface acoustic wave filter to pass a non-rejected sideband signal provided by the image reject mixer.

11. (Original) The apparatus of claim 9, further including:

an analog mixer to combine a synthesized carrier signal and a filtered sideband signal derived from a non-rejected sideband signal provided by the image reject mixer.

12. (Currently Amended) A system, including:

a digital processor to shift a digital baseband signal upward along a frequency spectrum by a selected amount of frequency shift to provide a first elevated frequency digital baseband signal and a second elevated frequency digital baseband signal derived from a phase-shifted version of the digital baseband signal; and

an omnidirectional antenna to transmit a communications signal derived from the first elevated frequency digital baseband signal,

wherein the selected amount of frequency shift is greater than about a bandwidth of the digital baseband signal.

13. (Original) The system of claim 12, further including:

a display to display information associated with the digital baseband signal.

14. (Original) The system of claim 12, further including:

a digital mixer to receive a selected one of the digital baseband signal and the phase-shifted version of the digital baseband signal and to provide the first elevated frequency digital baseband signal and the second elevated frequency digital baseband signal, respectively.

15. (Original) The system of claim 12, further including:

a filter to pass an analog signal provided by a digital to analog converter to receive a selected one of the first elevated frequency digital baseband signal and the second elevated frequency digital baseband signal.

16. (Original) The system of claim 12, wherein the omnidirectional antenna is included in a multiple-input, multiple-output communications system.

17. (Original) The system of claim 12, wherein the communications signal is formatted according to an Advanced Television Systems Committee (ATSC) standard.

18. (Currently Amended) A method, including:

shifting a digital baseband signal upward along a frequency spectrum by a selected amount of frequency shift to provide a first elevated frequency digital baseband signal and a second elevated frequency digital baseband signal derived from a phase-shifted version of the digital baseband signal,

wherein the selected amount of frequency shift is greater than about a bandwidth of the digital baseband signal.

19. (Original) The method of claim 18, further including:

mixing the digital baseband signal with a digital carrier frequency to provide the first elevated frequency digital baseband signal.

20. (Original) The method of claim 19, further including:

selecting a mixing technique from a Weaver technique and a Norgaard technique.

21. (Original) The method of claim 18, further including:

mixing the phase-shifted version of the digital baseband signal with a digital carrier frequency to provide the second elevated frequency digital baseband signal.

22. (Original) The method of claim 18, further including:

converting a selected one of the first elevated frequency digital baseband signal and the second elevated frequency digital baseband to a first analog signal and a second analog signal, respectively.

23. (Original) The method of claim 22, further including:

mixing the first analog signal and the second analog signal with a carrier frequency to provide an output signal; and

rejecting a resulting lower sideband signal from the output signal.

24. (Original) The method of claim 23, further including:

processing the output signal to provide a vestigial sideband television signal.

25. (Original) The method of claim 18, further including:

formatting the digital baseband signal according to an Institute of Electrical and Electronics Engineers 802.11 standard.

26. (Currently Amended) An article comprising a machine-accessible medium having associated information, wherein the information, when accessed, results in a machine performing:

shifting a digital baseband signal upward along a frequency spectrum by a selected amount <u>of frequency shift</u> to provide a first elevated frequency digital baseband signal and a second elevated frequency digital baseband signal derived from a phase-shifted version of the digital baseband signal<u>,</u>

<u>wherein the selected amount of frequency shift is greater than about a bandwidth of the digital baseband signal</u>.

27. (Original) The article of claim 26, wherein the information, when accessed, results in the machine performing:

converting the first elevated frequency digital baseband signal into a first analog sideband signal; and

converting the second elevated frequency digital baseband signal into a second analog sideband signal.

28. (Original) The article of claim 27, wherein the information, when accessed, results in the machine performing:

combining the first analog sideband signal and the second analog sideband signal to provide a non-rejected sideband signal modulated by an analog carrier frequency.

29. (Original) The article of claim 28, wherein the information, when accessed, results in the machine performing:

filtering the non-rejected sideband signal to provide a filtered sideband signal; and

combining the filtered sideband signal with a synthesized carrier signal to provide a communications signal.